

Claim Amendments

The following listing of the claims replaces all prior versions and listings of the claims in the application.

1. (Currently Amended) A cutting insert, comprising:
 - a top surface;
 - a bottom surface;
 - at least four convex cutting edges;
 - at least one conical clearance surface adjacent to at least one of the
convex cutting edges; and
 - nose corners connecting the at least four convex cutting edges.
2. (Original) The cutting insert of claim 1, wherein the cutting insert has four convex cutting edges.
3. (Original) The cutting insert of claim 2, wherein the cutting insert further comprises four nose corners connecting the four convex cutting edges.
4. (Original) The cutting insert of claim 3, wherein each of the nose corners comprises at least one of a circular arc, a series of circular arcs, and a multi-segment spline curve.
5. (Original) The cutting insert of claim 1, wherein the convex cutting edges comprise a circular arc.
6. (Original) The cutting insert of claim 2, wherein at least one of the convex cutting edges comprise a circular arc with a radius greater than or equal to two times a radius of the largest circle that may be inscribed on the top surface.

7. (Original) The cutting insert of claim 2, wherein at least one of the convex cutting edges comprise a circular arc with a radius greater than or equal to five times a radius of the largest circle that may be inscribed on the top surface.
8. (Original) The cutting insert of claim 2, wherein the convex cutting edges comprise a circular arc with a radius greater than or equal to ten times a radius of the largest circle that may be inscribed on the top surface.
9. (Original) The cutting insert of claim 5, wherein the convex cutting edges further comprise at least one substantially straight line.
10. (Original) The cutting insert of claim 6, wherein the convex cutting edge comprises two substantially straight lines.
11. (Original) The cutting insert of claim 6, wherein the convex cutting edge comprises three substantially straight lines.
12. (Original) The cutting insert of claim 1, wherein the convex cutting edges comprises at least one of a circular arc, a portion of an ellipse, a portion of a parabola, a multi-segment spline curve, a straight line.
13. (Canceled)
14. (Original) The cutting insert of claim 1, further comprising a conical clearance surface between the top surface and the bottom surface.
15. (Original) The cutting insert of claim 1, further comprising chip breaking geometry on the top surface.
16. (New) A cutting insert, comprising:
 - a top surface;
 - a bottom surface;

at least four cutting edges, wherein at least a portion of at least one cutting edge is in the shape of an arc or a portion of an ellipse and the cutting edges are substantially parallel to the bottom surface; and

nose corners connecting the at least four convex cutting edges.

17. (New) The cutting insert of claim 16, wherein the cutting insert has four convex cutting edges.

18. (New) The cutting insert of claim 17, wherein the cutting insert further comprises four nose corners connecting the four convex cutting edges.

19. (New) The cutting insert of claim 16, wherein the convex cutting edges comprise a circular arc.

20. (New) The cutting insert of claim 19, wherein at least one of the convex cutting edges comprise a circular arc with a radius greater than or equal to two times a radius of the largest circle that may be inscribed on the top surface.

21. (New) The cutting insert of claim 19, wherein at least one of the convex cutting edges comprise a circular arc with a radius greater than or equal to five times a radius of the largest circle that may be inscribed on the top surface.

22. (New) The cutting insert of claim 19, wherein the convex cutting edges comprise a circular arc with a radius greater than or equal to ten times a radius of the largest circle that may be inscribed on the top surface.

23. (New) The cutting insert of claim 16, wherein the convex cutting edges further comprise at least one substantially straight line.

24. (New) The cutting insert of claim 23, wherein the convex cutting edge comprises two substantially straight lines.

25. (New) The cutting insert of claim 24, wherein the convex cutting edge comprises three substantially straight lines.

26. (New) The cutting insert of claim 16, further comprising a conical clearance surface between the top surface and the bottom surface.
27. (New) The cutting insert of claim 16, further comprising chip breaking geometry on the top surface.